AMENDMENT TO THE SPECIFICATION

Please amend the Title beginning on page 1, line 1 and ending on page 1, line 2 to read as follows:

~~PERPENDICULAR READ/WRITE HEAD FOR USE IN A DISC DRIVE STORAGE SYSTEM~~**A HEAD INCLUDING A PERPENDICULAR WRITING ELEMENT HAVING A RETURN POLE LOCATED DOWNSTREAM OF A MAIN POLE RELATIVE TO A ROTATING RECORDING MEDIUM**

Please replace the paragraph beginning on page 5, line 17 and ending on page 6, line 6 with the following paragraph:

FIG. 1 is a top view of a disc drive 100, with which embodiments of the present invention may be used. Disc drive 100 includes a magnetic disc 102 mounted for rotational movement about an axis 104 and driven by a spindle motor (not shown). The components of disc drive 100 are contained within a housing that includes a base 106 and a cover (not shown). Disc drive 100 also includes an actuator 108 mounted to a base plate 110 and pivotally moveable relative to disc ~~104~~ 102 about an axis 112. Actuator mechanism 108, includes an actuator arm 114 and a suspension assembly 116. A slider 118 is coupled to suspension assembly 116 through a gimbaled attachment which allows slider 118 to pitch and roll as it rides on an air bearing above a surface 120 of disc 102. Actuator mechanism 108 is adapted to rotate slider 118 on an arcuate path 122 between an inner diameter 124 and an outer diameter 126 of disc 102. A cover 128 can cover a portion of actuator mechanism 108. Slider 118 supports a head 130 at a trailing portion. Head 130 includes separate perpendicular reading and write elements for reading data from, and recording data to disc 102.

Please replace the paragraph beginning on page 12, line 17 and ending on page 12, line 26 with the following paragraph:

Writing pole tip ~~220~~ 216 includes a trailing edge 224 and a leading edge 226. Trailing edge 224 is located in the write gap 208 and operates as the writing edge, which forms the transition between adjoining patterns 162 (FIG. 2) as discussed above. The location of writing edge 224 improves upon writing elements of the prior art due to the significantly higher write field gradient at that location than at leading edge 226. The linear density of data that can be recorded using write element 202 of the present invention is, therefore, higher than that of write elements of the prior art. Accordingly, writing element 202 can achieve higher areal density recordings than writing elements of the prior art.

Please replace the paragraph beginning on page 13, line 1 and ending on page 13, line 12 with the following paragraph:

Head 200 also includes a reading element 230 having a read sensor 232 for reading the data recorded in storage layer 160. Read sensor 232 is preferably a conventional read sensor that operates in accordance with magnetoresistive or giant magnetoresistive principles. In accordance with one embodiment of the invention, reading element 230 is positioned ~~downstream~~ upstream of writing element 202, as shown in FIGS. 5 and 6. Unlike prior art writing elements, the reduced size of the adjacent writing pole 204 cannot be used as a shield for read sensor 232 at the pole tip region. Instead, separate top and bottom shields 234 and 235 are used to shield sensor 232 from external magnetic fields. Top shield 234 is separated from top

main pole 204 by an non-magnetic layer 236.

Please replace the paragraph beginning on page 14, line 1 and ending on page 14, line 20 with the following paragraph:

In accordance with another embodiment of the invention, reading element 230 is positioned ~~upstream~~ downstream of writing element 202, as shown in FIGS. 7 and 8. This arrangement allows return pole 206 to operate as a bottom shield 235 for reading element 230. As a result, this embodiment of the invention eliminates the need for non-magnetic layer 236 and a separate bottom shield, which results in a more compact read/write head 200, process simplicity and yield increase. A further advantage to this embodiment of the invention is that the read sensor 232 can be positioned closer to disc surface 120. This is the result of being positioned closer to the trailing edge of the slider 118 (FIG. 1), which is lower than the leading edge of the slider during normal operation. This configuration is particularly advantageous for perpendicular recordings as compared to longitudinal recordings, because the fringing field generated by patterns with perpendicular magnetization 162 (FIG. 2) decays faster with the distance than the fringing field of longitudinal medium. It is therefore, desirable to position read sensor 232 as close to recording layer 160 as possible so that the small patterns with low fringing field can be accurately detected. Furthermore, the lower position of read sensor 232 allows for higher reading resolution thereby allowing read/write head 200 to operate with higher areal density recordings.

Please replace the paragraph beginning on page 15, line 22 and ending on page 16, line 2 with the following paragraph:

In accordance with another embodiment of the read/write head of the present invention, the perpendicular reading element is positioned downstream of the perpendicular writing element. In this embodiment, the perpendicular reading element includes a top shield (such as ~~235~~234) and a read sensor (such as 232) positioned between the top shield and the return pole (such as 206), which operates as a bottom shield for the read sensor.